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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,408	03/31/2004	James R. Lattner	2002B139/2	5396

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ExxonMobil Chemical Company
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P.O. Box 2149
Baytown, TX 77522-2149

EXAMINER

LEUNG, JENNIFER A

ART UNIT	PAPER NUMBER
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1764

MAIL DATE	DELIVERY MODE
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06/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/814,408

Applicant(s)

LATTNER, JAMES R.

Examiner

Jennifer A. Leung

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 21 May 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the ~~proposed amendment(s)~~ ^{response}: a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 24 and 30-33.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
see continuation sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

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Continuation of Item 11.

The request for reconsideration has been considered but it does not place the application in condition for allowance, for the same reasons set forth in the final Office Action.

Applicant (beginning at the last sentence on page 6) argues,

“The valves 60 and 62 control flow of catalyst to a lift gas riser 58, but the lift gas riser does not intersect with a regenerated catalyst outlet as required by the claims.”

Applicant, however, has not explained why the lift gas riser 58 does not meet the requirements of the claim.

Applicant (at page 6, second and third paragraphs) then argues,

“... it would not have been obvious to one of ordinary skill in the art to merely substitute the temperature type of flow control means of Hofferber for the Hirsch pressure type flow control means, because it would be essentially, if not entirely, impossible to control flow back and forth between Hirsch regenerator 40 and hopper 16 using the type of flow control device disclosed by Hofferber.

... the Hirsch valve system is used to control not just the rate of flow but also the direction of flow. This is not the purpose of the temperature controlled flow valves of Hofferber. The Hofferber valves work to control temperature between riser and reactor. To substitute the Hofferber valve system with the pressure type valve system in Hirsch would destroy the ability to control direction of flow between the Hirsch regenerator and hopper. Moreover, installing a temperature type control valve system in the Hirsch lift gas riser 58 would also not work at controlling temperature between regenerator and reactor. This is because Hirsch's lift gas riser flows into a hopper, not into a reactor. Therefore, even in the unlikely event that the Hofferber type control valve arrangement could be installed on lift gas riser 58, one of ordinary skill in the art would have no way, and the cited prior art references provide no teaching or suggestion as to how, to control temperature of the Hirsch reactors 10a and 10b through flow of catalyst from the regenerator.”

The Examiner respectfully disagrees. The control valve 60 in the apparatus of Hirsch is used to regulate the amount (and not the direction of flow) of regenerated catalyst from the regenerator 40 to the hopper 16. The direction of flow of regenerated catalyst is regulated by the control valve 46, located on the outlet line 44 of the regenerator 40. Hirsch discloses that during operation, the opening of valve 46 increases the flow of gas through the outlet line 44, which thereby reduces the pressure in the regenerator 40 to a level that is lower than the pressure in the hopper. It is this pressure differential between the hopper 16 and the regenerator 40 that dictates the direction of flow. The valves 60 and 62 located on the connecting lines between hopper 16 and regenerator 40 merely serve to regulate the amount of regenerated or spent catalyst flowing

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between the hopper 16 and the regenerator 40 (see column 5, line 48 to column 6, line 61). Thus, a substitution of a temperature type flow control means for the flow control means (i.e., control valve 60) in the apparatus of Hirsch would not make it "impossible to control flow back and forth between Hirsch regenerator 40 and hopper 16", as argued by Applicants, since the flow direction is not dictated by control valve 60. Instead, the flow direction is dictated by the pressure drop between the hopper 16 and the regenerator 40, produced by the opening of control valve 46.


In addition, Applicant argues that the installation of a temperature type control valve in the system of Hirsch would not work to control the temperature between the regenerator and the riser reactor, since the regenerated catalyst flows into a hopper, and not the riser reactor. However, the Examiner respectfully disagrees, since the regenerated catalyst that is fed to the hopper 16 ultimately flows to the riser reactor 10a, 10b.

Applicant (beginning at the bottom of page 7) then argues,

"There is no place in the Hirsch apparatus in which the Atkinson flow control mean can be used. One main reason is that the flow of catalyst from Hirsch's regenerator is already controlled by differential pressure control means to control flow and pressure between Hirsch's regenerator and hopper. The only valve means in Hirsch that controls flow from the disengaging vessel to the riser reactors 10a and 10b are valves 28a and 28b. There is no reason to control the valves 28a and 28b as a function of differential pressure, and there is nothing disclosed in Atkinson that would suggest controlling catalyst flow through the Hirsch valves 28a and 28b. Therefore, the use of catalyst circulation control valve means for controlling circulation of catalyst from a disengaging vessel to a riser reactor as a function of pressure would not have been obvious in view of what is disclosed in either Hirsch or Atkinson."

The Examiner respectfully disagrees. One having ordinary skill in the art at the time the invention was made would have been motivated to provide means for manipulating the catalyst circulation control valve 28a, 28b as a function of the differential pressure between an upper portion of the riser and the lower portion of the riser, because the differential signal obtained from the pressure sensors makes it possible to calculate the total feed material flow rate through the riser, thereby automating the control of catalyst flow through the riser, as taught by Atkinson et al.

Jennifer A. Leung ^{JAL}
June 9, 2007


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